

CLAIMS

What is claimed is:

1. A data processing system comprising:
a stock level data store containing stock level data for an item comprising current stock level data, stock demand data and stock replenishment data;
at least one processor coupled to the stock level data store; and
storage media coupled to the at least one processor and containing programming code for causing the at least one processor to perform processing comprising:
calculating predicted stock level data for said item using said current stock level data, said stock replenishment data and said stock demand data, said predicted stock level data comprising a date and/or time and a predicted number of stock units available for meeting a demand for the item at said date and/or time; and
graphically outputting changes in the predicted stock level data over a future period of time.
2. A data processing system as claimed in claim 1, wherein the stock replenishment data comprises data indicating a number of units of the item and a due date and/or time at which the units are due to be available for meeting the demand for the item.
3. A data processing system as claimed in claim 2, wherein the stock replenishment data further comprises a date and/or time at which units of the item are available for meeting the demand, and wherein said processing for calculating said predicted stock level data disregards stock replenishment data elements for

which the predicted or actual date and/or time is later than the due date and/or time.

4. A data processing system as claimed in claim 1, wherein said processing further comprises:

determining whether the predicted stock level for the item falls below a threshold level; and

transmitting a warning to a supplier of the item in response to a result of said determining.

5. A data processing system as claimed in claim 4 wherein said processing further comprises:

determining a date and/or time at which the stock level for the item is predicted to fall below the threshold level; and

wherein said warning comprises warning data including said predicted date and/or time.

6. A data processing system as claimed in claim 1, wherein the item is supplied from a supplier to a customer via an intermediary, wherein the stock demand data comprises customer demand data, and wherein the stock level data comprises stock level data relating to the levels of stock held by both the supplier and the intermediary.

7. A data processing system as claimed in claim 6 wherein the stock replenishment data includes replenishment data for work-in-progress at the supplier.

8. A stock planning tool to graphically output predicted stock level changes for an item over a period of time, the stock planning tool comprising:
computation means to calculate a predicted stock level for the item at a future time by adding an initial stock level to a predicted cumulative additional stock level at the future time and subtracting a cumulative stock demand at the future time; and

graphing means, in communication with said computation means, for providing a graphical output of variations of said predicted stock level over time.

9. A stock planning tool as claimed in claim 8, wherein said predicted cumulative additional stock level comprises a sum of predicted stock level increases in consequence of stock purchase orders and/or stock manufacture orders.

10. A stock planning tool as claimed in claim 9, wherein said predicted cumulative additional stock level sum excludes stock level increases resulting from at least one of stock purchase orders and stock manufacture orders that are overdue or predicted to be overdue.

11. A stock planning tool as claimed in claim 8, wherein said graphical output includes an output of variations of stock demand over time.

12. A stock planning tool as claimed in claim 8, wherein said graphical output includes an indication of a stock safety level.

13. A stock planning tool as claimed in claim 8, wherein said graphical output comprises a line or bar graph.

14. A supply planning method for assisting identification of a potential date and/or time at which there is a risk of a level of stock of an item falling below a threshold value, the method comprising:

reading initial stock level data from a data store, the initial stock level data comprising data indicating an initial stock quantity of the item;

reading customer demand data from a data store, the customer demand data comprising data indicating at least one order for a demanded quantity of the item and a corresponding date and/or time for meeting the order;

reading stock replenishment data from a data store, the stock replenishment data comprising data indicating at least one stock replenishment event increasing a stocked quantity of the item at a corresponding date and/or time;

calculating a cumulative item demand at a future data and/or time by summing demanded quantities data of the item preceding said future date/time;

calculating a cumulative stock level at a future data and/or time by summing said initial stock quantity and increases in stocked quantity of said item preceding said future date and/or time;

calculating a predicted level of stock by subtracting said cumulative item demand from said cumulative stock level;

repeating said predicted level of stock calculation for a plurality of different future dates and/or times; and

graphically outputting a plurality of predicted levels of stock for a corresponding plurality of different future dates and/or times.